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Mineral Industry Surveys

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LEAD IN FEBRUARY 2000

Domestic mine production, based upon the net quantity of lead recovered in the smelting of concentrate, increased by 5% in February compared with production in January. Secondary refinery production decreased by 3% in February and was down by about 1% compared with production in February 1999. Reported consumption remained essentially unchanged in February compared with the previous month.

According to *Platt's Metals Week* published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price (U.S. dollars) declined by 0.13% and 4.17%, respectively, in February.

The North American lead market remained steady during February as the industry neared the end of the winter replacement battery season. Declining lead prices and the expected increase in the supply of lead from Mexico remained significant concerns of the lead producers (Ryan's Notes, 2000). Demand for lead in Europe continued to follow its regular seasonal upswing, but no significant surges in the demand for replacement batteries were observed, owing to the fairly mild winter weather. The European lead market essentially remained in balance during February as evidenced by a modest decline in Western European LME stocks(CRU International Ltd., 2000).

National Defense Stockpile monthly cash disposal (sale) of lead in February was 3,667 metric tons (4,042 short tons). Sale of lead to date in fiscal year 2000 (October 1999 through February 2000) was 22,490 metric tons (24,791 short tons). The Defense National Stockpile Center recently announced that it would limit its monthly offerings for sale of lead to 1,500 metric tons (1,650 short tons) beginning in May and would continue this offering through the remainder of fiscal year 2000 (U.S. Defense National Stockpile Center, 2000).

In China, data recently released by China National Nonferrous Metals Corp. revealed significant increases in lead production and lead exports during 1999. Lead production was up by 20.1% to a level of 895,000 tons. Net exports of lead increased by 89.8% to 441,750 tons (Metal Bulletin, 2000a).

Initial results from a drilling program conducted by Canada's Minco Mining and Metals Corp. at the White Silver Mountain polymetallic property in China showed lead contents of 3.9% to 4.4%. Canada's Teck Corp., which effectively took control of the White Silver Mountain property in 1999, has the option to earn a 70% interest in Minco's interest in Gansu Gayin, a joint-venture company held by Minco and China's Baiyin Non-Ferrous Metals Co. Baiyin is the current operator of the polymetallic mines lying just above the White Silver Mountain property (Mining Journal, 2000).

Boliden's Los Frailes Mine near Seville, Spain, was approaching full operation by the end of March 2000. The mine was operating at about 80% of capacity in February, yielding 100,000 tons per year of zinc and 38,000 tons per year of lead contained in concentrates. Los Frailes was forced to close in April 1998 when a tailings dam failed, flooding a significant portion of the neighboring land. The mine was restarted in June 1999 after its milling license was restored by the local administration, along with a permit to dump tailings in the adjacent Aznalcollar open pit mine (Metal Bulletin, 2000b).

Australia's Western Metals has announced plans to expand the ore processing capacity at its Pillara lead-zinc mine in the Kimberley region of Western Australia. The expansion from the current 1.5 million tons per year to 2.4 million tons per year of ore processed will effectively consolidate and reduce the cost of Western's processing operations. Expansion of the Pillara facilities was expected to be completed by January 2001. In 1999, Western reported a total production of 139,000 tons of zinc and 61,000 tons of lead in concentrates from its mining operations. The company anticipates that this production rate will continue in the short term. Although Western plans to close the aging concentrator at its Cadjebut Mine, it is anticipated that the deeper deposits at the Pillara Mine will be of appreciably higher grade, yielding a higher contained metal output, thereby compensating for the closure of Cadjebut (Metal Bulletin, 2000c).

References Cited

CRU International Ltd., 2000, Market commentary: CRU Monitor—Lead, February, p. 3.

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Ryan's Notes, 2000, Lead and Zinc: Ryan's Notes, v. 6, no. 9, February 28, p. 4.
U.S. Defense National Stockpile Center, 2000, Stockpile accepts lead bids and announces change in sales plan: Fort Belvoir, VA, U.S. Defense National Stockpile Center news release, April 7, 2 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

	1999		2000		
	January - December p/	January - February	January	February	January - February
Production:					
Mine (recoverable)	505,000	82,300	35,100	37,000	72,100
Primary refinery	NA	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,050,000	170,000	88,900	85,900	175,000
Estimated	14,300	2,760	898	867	1,770
Recovered from copper-base scrap e/	15,000	2,500	1,250	1,250	2,500
Total secondary	1,080,000	175,000	91,000	88,000	179,000
Stocks, end of period:					
Primary refineries	XX	XX	NA	NA	XX
Secondary smelters and consumers	XX	XX	72,500	71,900	XX
Imports for consumption:					
Ore and concentrates (lead content)	12,300	1,860	(2/)	NA	(2/) 3/
Refined metal	311,000	44,500	46,900	NA	46,900 3/
Consumption:					
Reported	1,580,000	265,000 r/	132,000 r/	132,000	264,000
Undistributed e/	83,000	13,900 r/	6,940 r/	6,950	13,900
Total	1,660,000	278,000 r/	139,000 r/	139,000	278,000
Exports (lead content):					
Ore and concentrates	93,500	2,530	1,790	NA	1,790 3/
Bullion	64,100	12,600	5,420	NA	5,420 3/
Wrought and unwrought lead	37,300	5,140	3,450	NA	3,450 3/
Ash and residues	1,430	389	312	NA	312 3/
TEL/TML preparations, based on lead compounds	2,190	231	29	NA	29 3/
Exports (gross weight): Scrap	117,000	20,600	6,170	NA	6,170 3/
Platt's Metals Week average North American producer price (cents per pound)	43.72	43.72	43.62	43.56	43.59

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.
1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.
2/ Less than 1/2 unit.
3/ Includes data for January only; February data not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME $/metric ton	LME £/metric ton	Sterling exchange rate dollars/£
1999:				
February	43.75	513.33	315.38	1.627637
November	43.64	477.94	294.94	1.620480
December	43.65	478.74	296.78	1.613130
Year	43.72	502.25	310.49	1.617887
2000:				
January	43.62	471.71	287.56	1.640400
February	43.56	452.02	282.52	1.599985

Source: Platt's Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP 1/

(Metric tons, gross weight)

Item	Stocks January 31, 2000	Net receipts	Consumption	Stocks February 29, 2000
Battery-lead	20,400	94,100	92,600	21,900
Soft lead	W	W	W	W
Drosses and residues	3,130	5,160	4,820	3,470
Other 2/	1,560	2,180	2,070	1,660
Total	25,000	101,000	99,500	27,000
Percent change from preceding month	XX	-5.9	-7.8	+7.9

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN FEBRUARY 2000 1/

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	50,600	--	--
Remelt lead	W	W	W
Antimonial lead	34,700	W	W
Other 2/	W	W	--
Total lead-base	85,900	105	439

W Withheld to avoid disclosing company proprietary data; included in "Total."
-- Zero.

1/ Data are rounded to no more than three significant digits.

2/ Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES 1/

(Metric tons, lead content)

Uses	1999 January - December p/	1999 January - February r/	2000 January	2000 February	2000 January - February
Metal products:					
Ammunition, shot and bullets	40,800	7,210	3,190	4,120	7,310
Brass and bronze, billet and ingots	3,790	590	346	328	674
Cable covering, power and communication and calking lead, building construction	2,790	357	298	208	505
Casting metals	4,660	798	378	380	758
Sheet lead, pipes, traps and other extruded products	16,200	2,570	1,350	1,290	2,640
Solder	9,460	1,550	701	992	1,690
Storage batteries, including oxides	1,430,000	240,000	120,000	119,000	240,000
Terne metal, type metal, and other metal products 2/	4,040	394	563	251	810
Total metal products	1,510,000	254,000	127,000 r/	127,000	254,000
Other oxides and miscellaneous uses	63,800	10,700	5,000	4,990	9,990
Total reported	1,580,000	265,000	132,000 r/	132,000	264,000
Undistributed consumption e/	83,000	13,900	6,940 r/	6,950	13,900
Grand total	1,660,000	278,000	139,000 r/	139,000	278,000

e/ Estimated. p/ Preliminary. r/ Revised.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

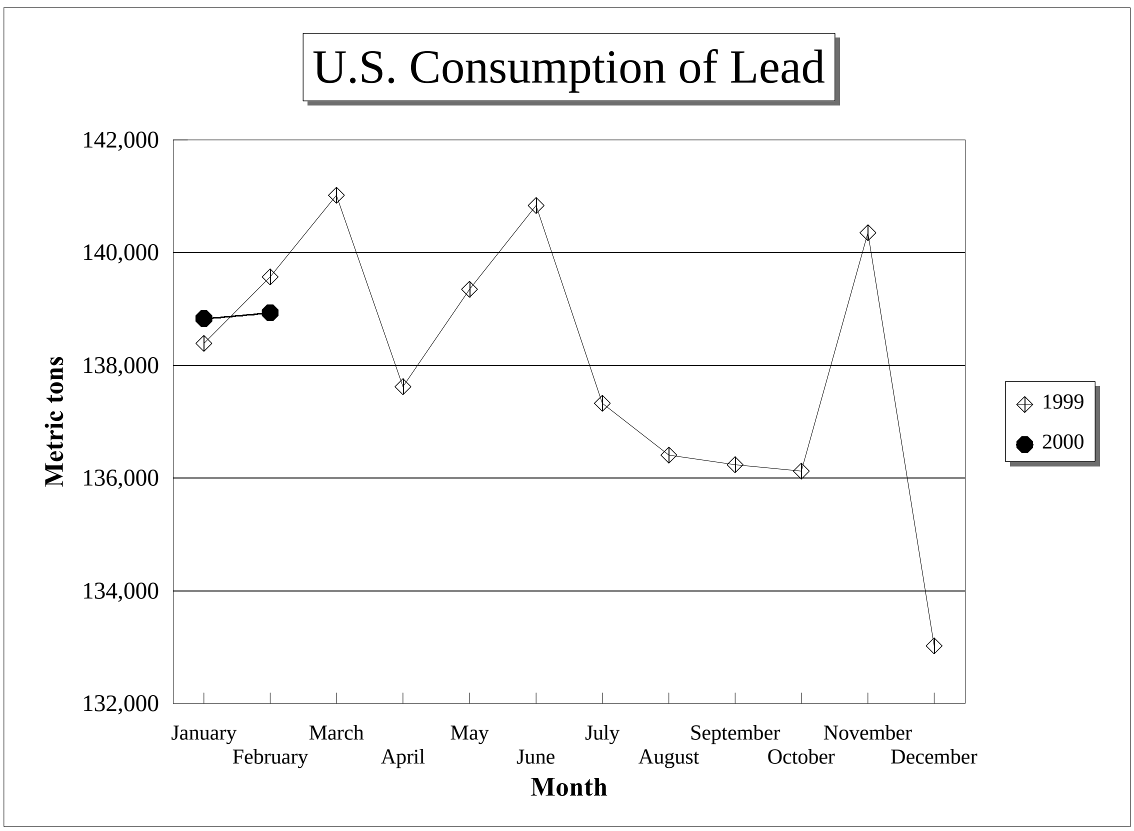

TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND
CONSUMPTION OF LEAD IN FEBRUARY 2000 1/

(Metric tons, lead content)

Type of material	Stocks January 31, 2000	Net receipts	Consumption	Stocks February 29, 2000
Soft lead	32,100	76,900	76,400	32,700
Antimonial lead	24,100	32,900	32,800	24,200
Lead alloys	W	21,400	22,600	W
Copper-base scrap	W	227	222	W
Total	72,500	131,000	132,000	71,900

W Withheld to avoid disclosing company proprietary data; included in "Total."
1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS 1/

(Metric tons)

	1999			2000
	November	December	Year	January
Lead content:				
Ore and concentrates	2,520	2,250	93,500	1,790
Bullion	10,500	3,630	64,100	5,420
Materials excluding scrap	3,230	1,820	37,300	3,450
Ash and residues	101	47	1,430	312
TEL/TML preparations, based on lead compounds	113	70	2,190	29
Total	16,500	7,820	198,000	11,000
Gross weight: Scrap	10,500	8,720	117,000	6,170

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 8

U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN 1/

(Metric tons, lead content)

Country of origin	General imports				Imports for consumption			
	1999			2000	1999			2000
	Year	January	December	January	Year	January	December	January
Ore, matte, etc.:								
Canada	1,220	1,220	--	(2/)	(2/)	--	--	(2/)
Mexico	1,900	--	--	--	1,580	--	--	--
Peru	8,760	496	1,000	1,270	193	--	--	--
Other	30,200	1,970	10,900	--	10,500	1,860	2,890	--
Total	42,100	3,690	11,900	1,270	12,300	1,860	2,890	(2/)
Base bullion:								
Colombia	--	--	--	49	--	--	--	49
Dominican Republic	90	--	47	--	90	--	47	--
Total	90	--	47	49	90	--	47	49
Pigs and bars:								
Australia	21,900	--	4,280	15,100	21,900	--	4,280	15,100
Canada	198,000	19,200	16,200	18,900	198,000	19,200	16,200	18,900
China	47,500	--	6,670	11,800	47,700	--	6,670	11,800
Germany	1,000	44	69	46	1,000	44	69	46
Mexico	27,200	4,350	1,260	922	27,200	4,350	1,260	922
Peru	6,930	543	2,750	--	6,930	543	2,750	--
Other	8,460	329	2,590	149	8,460	329	2,590	149
Total	311,000	24,500	33,800	46,900	311,000	24,500	33,800	46,900
Reclaimed scrap, including ash and residues	--	--	--	25	--	--	--	25
Grand total	353,000	28,100	45,700	48,200	324,000	26,300	36,700	47,000

-- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.